AMENDMENTS TO THE CLAIMS

This Listing of Claims will replace all prior versions and listings of claims in this application.

Listing of Claims:

1. (Currently Amended) A process for regenerating a hydrogenation catalyst comprising stripping at from 50 to ~~300°C~~ 250°C with a substance or a substance mixture which under the process conditions has no oxidizing action and is present in the gaseous state and wherein the hydrogenation catalyst is formed by an active composition, which has been applied to a nonporous, metallic support and which has been used in a gas-phase selective hydrogenation of acetylene in a C_2 fraction or of propyne and/or propadiene in a C_3 fraction.

2. (Previously presented) The process as claimed in claim 1, wherein the metallic support is in the form of a woven mesh or knitted mesh.

3. (Previously presented) The process as claimed in claim 1, wherein the substance or substance mixture which is used for stripping is selected from the group consisting of hydrogen, nitrogen, argon and hydrocarbons.

4. (Previously presented) The process as claimed in claim 3, wherein nitrogen or a mixture of nitrogen and hydrogen is used for stripping.

5. (Previously presented) The process as claimed in claim 1, wherein stripping is carried out at from 70 to 250°C.

6. (Previously presented) The process as claimed in claim 1, wherein the hydrogenation catalyst is rinsed with a nonpolar organic solvent or solvent mixture in addition to stripping.

7. (Previously presented) The process as claimed in claim 6, wherein rinsing is carried out at ambient temperature.

8. (Previously presented) The process as claimed in claim 6, wherein rinsing is carried out for a period of from 15 minutes to a plurality of days.

9. (Previously presented) The process as claimed in claim 6 carried out in situ.

10. (Previously presented) The process as claimed in claim 6 carried out ex situ.

11. (Previously presented) The process as claimed in claim 6, wherein the hydrogenation catalyst is firstly rinsed and subsequently stripped.

12. (Currently Amended) ~~The~~A process for the repeated regeneration of a hydrogenation catalyst, which comprises regenerating the hydrogenation catalyst two or more times by stripping as claimed in claim 1 or by rinsing and stripping as claimed in claim 6 and subsequently by oxidative treatment or a combination of stripping as claimed in claim 1 or rinsing and stripping as claimed in claim 6 and oxidative treatment.

13. (Previously presented) The process as claimed in claim 1, wherein the hydrogenation catalyst is a thin-film catalyst.

14. (Previously presented) The process as claimed in claim 13, wherein the hydrogenation catalyst is formed by an active composition comprising one or more hydrogenation-active metals.

15. (Currently amended) The process as claimed in claim 3, wherein the substance or substance mixture which is used for stripping ~~are~~ comprises saturated hydrocarbons.

16. (Previously presented) The process as claimed in claim 15, wherein the saturated hydrocarbon is methane.

17. (Previously presented) The process as claimed in claim 5, wherein stripping is carried out at from 100 to 150°C.

18. (Previously presented) The process as claimed in claim 9, wherein the process is carried out in supernatant solvent and/or in solvent circulated by means of a pump.

19. (Currently amended) The process as claimed in claim 14, wherein the ~~hydrogen-active~~ hydrogenation-active metal is palladium.

20. (Previously presented) The process as claimed in claim 19, wherein palladium is silver doped.

21. (New) The process as claimed in claim 1, wherein stripping is carried out at from 50 to 100°C.